

ABSTRACT OF THE DISCLOSURE

5 A system and method for enabling Intellectual Property (IP)
Blocks to be reused at a system level. The present invention
represents the IP blocks as blocks that exchange messages without
needing to represent the functionality of the IP blocks. The
implementations of these IP blocks exchanges messages through
complex signaling protocols. In conventional systems,
interfacing between IP blocks that use different signaling
protocols is a tedious and error prone design task. The present
invention uses regular expression based protocol descriptions to
show how to map the message onto a signaling protocol. Given two
protocols, the present invention builds an interface machine that
automatically labels data referenced by all protocols. The
present invention is capable of generating the interface even
when the data sequencing of the two protocols differs.